

Remarks

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Thus, claim 1 has been amended to clarify the invention by incorporating language along the lines set forth in the paragraph bridging pages 5-6 of the specification, as will also be discussed below.

Amended claim 1 also refers to “a total concentration of proton sources” instead of “a total proton concentration”, in consideration of the calculation of this parameter, for example, at page 23, lines 5-9 of the specification, where the amount of added water (instead of the amount of protons formed by dissociation of water) is used for the calculation.

Each of claims 4, 6, 7 and 9 has been amended consistent with the corresponding amendment to claim 1.

Claim 5 has been amended in response to the rejection of this claim under the second paragraph of 35 U.S.C. §112, rendering the rejection moot.

The patentability of the presently claimed invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Thus, the rejection of claims 1-11 under 35 U.S.C. §102(b) as being anticipated by EP 1 048 683 (EP ‘683), as well as the rejection of claims 1-6 and 9-11 under 35 U.S.C. §102(b) as being anticipated by EP 0 299 730 (EP ‘730) are respectfully traversed.

The present invention, as clarified in amended claim 1, is directed to a process for producing an aliphatic polyester of **a controlled molecular weight and a controlled hydrolyzation rate constant** by ring-opening polymerization of a cyclic polyester containing **water and an alcohol which function** as initiators or/and molecular weight-adjusting agents. The present invention is based on the discovery that water and an alcohol both function as proton-source compounds, but the former is a carboxyl-source compound and the latter is an alkoxylycarbonyl-source compound, and by varying the total amount of proton-source compounds (i.e., carboxyl-source compounds (including water) + alkoxylycarbonyl-source compound (including alcohol)) and the ratio therebetween by varying the amounts of the water and alcohol in the cyclic ester, it becomes possible to provide an aliphatic polyester with a

controlled molecular weight and a controlled hydrolyzation rate constant, as demonstrated in Figs. 1 and 2 of the present application, respectively.

The positive use of water and alcohol in varying amounts and ratios for controlling the polymerization is not taught or suggested by any of the cited references.

EP '683 discloses ring-opening polymerization of a cyclic ester containing water and an alcohol, but fails to disclose the positive function of water as a polymerization control agent and how to use the water and alcohol for providing an aliphatic polyester with a controlled molecular weight and a controlled hydrolyzation rate constant. The same also holds true with regard to the EP '730 reference.

The rejection of claims 12 and 13 under 35 U.S.C. §103(a) as being unpatentable over EP '683 or EP '730 in view of USP 5,885,709 (US '709) or USP 2,937,164 (US '164) is respectfully traversed.

The comments set forth above concerning EP '683 and EP '730 are equally applicable to this rejection.

Furthermore, neither of the US '709 or US '164 references cure the defects of the EP '683 and EP '730 references in failing to suggest the subject matter of claim 1, on which claims 12 and 13 indirectly depend. That is, both of these secondary references fail to disclose the positive function of water as a polymerization control agent and how to use the water and alcohol for providing an aliphatic polyester with a controlled molecular weight and a controlled hydrolyzation rate constant.

For these reasons, Applicants take the position that the presently claimed invention is clearly patentable over the applied references.

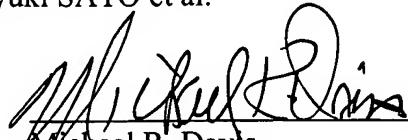
The Examiner has provisionally rejected claims 1-14 for obviousness-type double patenting based on claims 1-12 of Serial No. 10/575,468. The Examiner is kindly requested to hold this rejection in abeyance pending an indication that the claims of the present application are otherwise in condition for allowance.

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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